

REMARKS

This Amendment is respectfully submitted by Applicant in response to the Office Action mailed December 23, 2002. Applicant has carefully reviewed the Office Action and the cited references, and this Amendment is believed to be fully responsive. In view of the amendments and remarks submitted herein, Applicant respectfully requests reconsideration and withdrawal of the pending rejections, and allowance of the application.

Claims 1-11 are pending in the application. Claims 1-3 and 7-11 stand rejected under 35 U.S.C. §102(b) as being anticipated by Gotzenbrucker et al. Claim 5 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Gotzenbrucker et al. Claims 4 and 6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gotzenbrucker et al. in view of Driscoll.

In response, Applicant has amended independent claim 1 to clarify pre-existing features of the invention, particularly, among other features, that each of said faces has had removed from part of it by abrasion a depth of material which increases gradually as the outer edge is approached and defines a removal region having a profile which varies substantially smoothly along the removal region. Applicant respectfully submits that claim 1 as amended is allowable over Gotzenbrucker, and respectfully traverses the rejection for at least the reason that Gotzenbrucker fails to teach or suggest at least this feature.

According to amended claim 1, abrasion is used to remove a depth of material such that the depth of the resulting impression varies smoothly (i.e., non-stepwise) over the

extent of the removal region. FIG. 2 of the present application, for example, shows a substantially linear, smooth gradient in the removal region, while the description in page 5, lines 18-32 of the present specification, for example, describes an abrasion method using a spherical surface to create the removal region, which is not linear but does still vary smoothly. In combination with the mechanical abrasion process of formation and removal region profile defined in claim 1, the particular structure of the slice further defined in claim 1 has been found by the present inventor to be advantageous due to, among other things, improved strength and supportability provided by retention of the outer rim of original material.

By contrast, the multi-stage etching technique described in Gotzenbrucker produces a removal profile which has definite steps, i.e. one which does not vary substantially smoothly. Such a stepped profile is shown by example in FIGs. 3, 6, and 8 of Gotzenbrucker. This stepped profile arises necessarily as the desired sloping profile of Gotzenbrucker cannot be achieved by a single etching stage alone (see FIGs. 5 and 7 of Gotzenbrucker, for example), and instead at least two etching stages must be used. The angle control used by Gotzenbrucker is provided by applying two sequential etching operations to the surface with a staggering of the respectively defined etches. This produces a groove part (part of the step) which has the sum of the two etches as its depth and another part of which has the depth of only one etch.

This illustrates a clear structural difference between amended claim 1 and Gotzenbrucker, and Gotzenbrucker furthermore appears, due to its described method of formation, to teach away from a modification of its structure to form the slice of amended claim 1. The slice according to amended claim 1 is capable of being produced as a more robust profiled slice, and it allows a different scale of device (higher stable blocking voltages, e.g.) than that provided by the methods taught by Gotzenbrucker while still allowing production in a practical and economic manner.

For at least these reasons, Applicant respectfully submits that claim 1 as amended is allowable over the reference of record, including Gotzenbrucker, and Applicant requests reconsideration and withdrawal of the rejection. Claims 2-11, having all of the features of amended claim 1, plus additional features, are believed to be similarly allowable for at least the reasons as applied to independent claim 1, plus at least the additional reason that neither official notice (re: the rejection of claim 5) nor Driscoll (re: the rejection of claims 4 and 6) are believed to remedy the deficiencies of Gotzenbrucker regarding the pending claims. Accordingly, Applicant respectfully traverses and request reconsideration and withdrawal of the rejection of claims 2-11.

For at least the foregoing reasons, Applicant believes that this case is in condition for allowance, which is respectfully requested. The Examiner should call Applicant's attorney if an interview would expedite prosecution.

Respectfully submitted,

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